/70 cont./

764 Among the Pakidái I was able to be present on the sad occasion of a burial ceremony for the young, vigorous, and happy Hokotómarimá, an unmarried youth whose age was 19 years at most. He had fallen from the top of a pupunha palm (Guilielma speciosa Mart.) (the liana lashing of his climbing apparatus, see p. 121, had evidently not been firm enough) and must have suffered internal injuries. All the efforts to save him, which were carried out uninterruptedly by the chief and his helpers for two days and nights, were unsuccessful.

After the dead Hokotómarimá had been pushed into the wooden frame, five warriors whose bodies were painted all over with urucú carried him out of the maloka, amid loud lamentations. Two men carried the frame, one in front and one in back; now and then they were relieved by their companions. The women of his kin group, in part with children on their hips or by the hand, accompanied him, amid heart-rending, shrill tones of lament and endlessly flowing tears, on this last journey to the edge of the forest. Then the five men went on alone with the deceased. (The chief did not take part; he would do so only if the deceased were a relative.) After a walk of about 20 minutes, they suddenly stopped, set down the frame, and selected a suitable tree, in order to hang it in the crown. When they had found it, in this case a tall imbauba tree (Cecropia palmata Wild.) -- tokorí --, two men climbed up, each with two long lianas (cipó-titica) hanging around their necks. They chose a particularly thick limb, then lowered the lianas, where their companions tied them to the wooden frame, and pulled it up with the dead man lying in it. When the frame was hanging firmly and securely on the branch, they climbed down again.

Immediately thereafter the five men started back to the maloka. On the way, however, the brother of the deceased cut into a tree, the name of which the deceased bore -- hokotómarimá -- matamatazeiro (Eschweilera matamata Hub.), with his tercado (large bush-knife) and in the lower part of the trunk, deep notches which had the following appearance ~~~~~~~~~~~~ and extended around the entire trunk. This was supposed to make the tree die.

Surára
Pakidái

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498. (cont.)
I should like to mention the Kaskihí Indians in the northeastern Chaco, among whom the witch doctor tries to heal the sick in the same way (Baldus, 1931, p. 143).

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During my nine-months' stay among the Surára and Pakidái the following sicknesses occurred there: grippe, pneumonia, malaria, chicken pox, and a gastric fever; fortunately, none was fatal (499). But the two Surára women who had pneumonia,

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499. Only the Pakidái youth Hokotõmarimí died after a fall from a pupunha palm, which probably caused internal injuries (see p. 149).

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But the two Surára women who had pneumonia, first a young woman, Xunamí, the wife of Kurikayawõ, the younger brother of the chief, and later an older woman, Xanimí, the approximately 47-year-old mother of Anyarawõ (see pp. 123/125), and a boy, Xaniwõ (see p. 127), about 12 years old, would probably not have survived without the penicillin that I had brought along, for, in spite of untiring treatment by the chief and his helpers, their condition grew worse from day to day. In the first instance, the chief, Hewemão, and the husband, Kurikayawõ, finally permitted me to give Xunamí a penicillin injection in the upper arm on two successive days, whereupon she improved dramatically (500). In the second and third cases,

500. This cure increased my reputation tremendously, so that afterward I was properly adopted into the tribe of the Surára and, on the occasion of the great festival in memory of the dead, was also permitted to drink the banana soup mixed with the bone ashes of deceased relatives (see p. 231). If the woman had died after the injection, however, the intervention could have had grave consequences for me.

/118 cont./

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563. (cont.)
Steinen about the Suya on the Xingú, in which he declares that these Indians knew how to use the pencil very well and drew beautiful motifs in his notebook, although he was the first white man they had seen (Karl von den Steinen, 1886, p. 212).

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Younger people are distinguished by a gift for rapid comprehension and an astonishing learning capacity. Although these Indians very rarely come in contact with caboclos, and in most cases only the men, both sexes have at their command a rather large store of Portuguese words and figures of speech. One little
124 Surára boy about nine years old, Jubeauwõ, also called Mandú,
159 who had spent almost two years in the hut of the palm-fiber
[191] gatherer Manuel Antonio Gómez on the Rio Aracá, had a nearly perfect command of the Portuguese language and performed unique service as my interpreter. I owe it to him alone that I was able to penetrate more deeply into the mental culture of the Surára and Pakidái and put together a complete vocabulary (564).

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564. Three years ago the little boy suffered dangerous burns on the abdomen by an upset vessel containing boiling tree resin. Since the chief had given up hope that he would recover, he wanted to have
[888] him given the deathblow. The custom of this tribe, as well as that of the Pakidái, decrees that all old and seriously ill persons who are no longer able to take part in the general migrations must be killed (see pp. 153/154). The grandmother of the little boy, who is an orphan took him secretly one night to the hut of the Spanish palm-fiber gatherer,

/118 cont./

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564. (cont.)
Manoel Antonio Gómez, who succeeded in saving his life. The chief was said to have been very angry at first over the arbitrary action of the grandmother, but then, when he saw that the little one had recovered, he calmed down.

123 Most men, after but a short time, had no difficulty handling
153 our two guns; a few were soon even operating the outboard
[177] motor, and the Surára chief Hewemão, who showed great interest in my camera, took very acceptable pictures with it.
153 The reasoning power seems to be somewhat more strongly developed among the men than among the women (565).

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565. This conclusion agrees with an observation by Baldus among the Tumerehã, and the scholar adds a remark which could also be applied to the Surára and Pakidái: "The differences in the talents of the sexes are perhaps the result of their way of life and division of labor. Thus, among the Tumerehã, the man's way of acquiring food has probably developed his acuteness, for he does not merely gather fruits, like the woman, but also goes hunting..." (Baldus, 1931, p. 119).

802 /119/ XII. Counting and Conception of Time

The Surára and Pakidái count only to three:

1 -- mahón

2 -- porokabõ

3 -- prukatabõ.

6: Vinci T-5 (1950) 1959 SQ18 Yanoama SQ18
Sanema

a torrid sun or the cold dankness of the forest after dark, the Indians are especially subject to respiratory troubles, bronchitis and chronic catarrh being common. It must be a short step from these to tuberculosis, to judge by the widespread incidence of the latter, though it is worth recording that among the Sanatari themselves the disease does not appear to have reached the same alarming proportions as among the Taurepàn of the Eastern uplands, where it [192] is a real scourge. Their name for it is an onomatapoeic one—*tectecmèh*—suggesting the coughing and catarrhal effects of any malady of the respiratory system, to which the word is applied.

[784] They are more afraid of tuberculosis than of any war, or any surprise [721] attack at night. Tribes infected with *tectecmèh* become taboo, and by the same token immune from attack, because their enemies are more afraid of their tuberculosis than their arrows. I was told this by Uarema, who said that some time ago a party of their enemies (of unspecified origin) set out to attack them. They had already been several days on the march when they learned that the Guayca were suffering from a bad epidemic of colds and catarrh. They gave up their idea of attacking them, and returned to their own lands.

752 Wounds infected by insects can be quickly cured, the reason being that with 164 these primitive Indians the defence-mechanism is vigorous and reacts immediately when assisted by antibiotics or sulphonamides. In this connection I have often determined by experiment the relative healthiness of the forest compared with the unhealthiness of the grasslands or savannah lying open to the sun. In the forest, damp and mouldering like some subterranean world, wounds rarely become infected, even if they are not kept clean.

123 I once fell down on a clay hillside, in the Upper Cuyuni country, with a 164 machete in my hand. It was pouring with rain and everything was covered with 752 mud and very slippery. The machete stuck into the ground as I fell forward, and my hand—as happens in the case of a fall like this—automatically tightened on the tool to help me regain my balance and slid along the blade, which was always kept razor-sharp. I had three fingers cut open right through the middle joint, the muscles and tendons being severed. We had nothing with us, not even a clean handkerchief. I at once closed my hand and bound up the fist with a bit of old rag. We then spent some days making our way down to the base-camp where we had our medicines and disinfectants. There I opened my fist, to find the cuts miraculously closed up, without the slightest sign of any infection. A

6: Vinci T-5 (1950) 1959 SQ18 Yanoama SQ18
Sanema

few days later my hand was completely healed, even though the tendons had been severed and the fingers partially paralysed.

Some antibiotic substance must surely be produced in great quantities in the soil of the dank forest regions: while in the grasslands the cycle of growth is altered owing to the effect of the sun's direct rays, which either destroy the culture or impede its development.

The most dangerous diseases are those which attack the young children and are naturally reflected in their mothers, too. Intestinal worms are the scourge of primitive populations and I have constantly observed that while among the Makiritari they affect the grown men as well, among the more primitive Shirians they are limited exclusively to the women and children, whose bellies are often swollen to an enormous size. Many of the children die at an early age from this, and from colics, intestinal obstruction, and suffocation.

Indians don't live long, even if they manage to survive the dangers that beset them in their early years. Like all primitive races, they develop precociously—the girls reaching womanhood at ten—and old age descends quickly upon them, their bodies being worn out by hard work, exposure to the extremes of weather, and anchylosis. Ancients are few and far between in any tribe: not more than one or two among some scores of men and women. The Indians whom we usually call old are not, in most cases, much more than forty.

In spite of this I have always believed in the existence of some super-ancient, some Methuselah of the Forest, an altogether exceptional individual whose organism has battled with and overcome every ill, achieving a high degree of immunity and resistance, and living on indefinitely. Certain experiences of mine with tribes of various races have led me to this conclusion.

IV

The Aracoa is a river of white water flowing over a bed of large granite stones. Near its mouth are huge falls where it pours over a solid sandstone shelf on its way to join the even clearer waters of the Uaruricoera, a little above the confluence of its sister stream the Quadu.

After a descent lasting several days, we were in camp on this sandstone shelf, with the roar of the falls in our ears, enjoying a feast of sunshine that everyone seemed to appreciate. Our chief preoccupations were the louse and the

6: Vinci T-5 (1950) 1959 SQ18 Yanoama SQ18
Sanema

The poisonous ray with the sting in its tail lies crouched on the bottom, 136
scarcely distinguishable in colour from the sand. The incautious man who puts
his foot on it is immediately stung and suffers the most acute pain he has ever
felt. In this connection, we may mention an interesting cure which the natives
of Guiana resort to for ray-stings. They poultice the affected region with a [752]
compress soaked in water used for washing the intimate parts of a woman dur-
ing her menstrual period. This cure has yet to be verified scientifically, but we
hope matters will remain as they are. Why should the people be deprived of a
remedy at once so cheap, so exotic—and so successful?

That freshwater electric eel, *gimnote americano*, awaits its prey in the hopes
of transmitting some of its excess electricity, which accumulates in its belly-
batteries, charged during its periods of rest by the current passing from the
anode of the rocky bottom to its own cathode. It is a short, thick eel with an
ugly expression as though it had a set of false teeth, probably due to its com-
pressed energy, a nervous force denied an outlet, and also undeniably caused
by the glaring injustice of Man. For Man has raised monuments to Volta and
Faraday which would more fittingly have honoured the electric eel.

Last—and most frequent—of the five classic perils, is that carnivorous fish
known in Brazil as the *piraña* and in Venezuela as the *caribe*. In seething, ant-
like swarms it will lie impatiently waiting for its bloody prey: and while wait-
ing, just to keep in training, it will devour its own kind. Carnivorous fish are
not all of the same species: actually almost all freshwater fish in the tropics are
carnivorous, even the most innocent of them, and I recall now that the best
way to clean up certain wound or infected places is to dip the part into a shallow
stretch of river water. Crowds of the most sympathetic little fish will come
along sniffing and nibbling, and they will clean up the wound in such a way as
to strike envy into any surgeon's heart. But there are also fish that will nip off
a finger, or any soft part, at one fell swoop—as often happens to the diamond
workers when they dive into deep pockets in search of diamonds.

Generally speaking, the five perils we have mentioned, evil genii of the
plain, are not met with in waters at a higher altitude. These they cannot reach
because of the rapids which bar the way, and they would be unable to survive
there in any case, the water being too cold for them. Only the king of them all,
the cayman, permits himself to send his more modest envoys up into the higher
regions—alligators of tranquil character and appetizing flesh. And the ana-
conda will, from time to time, allow her little ones, who are eager to get to

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736 Orphans in general are cared for by relatives, but when they do not have any, they are normally adopted. I have never known of any who was left in helplessness.

The Community

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[162] The population of a seat or settlement varies between 60 and perhaps 120, but most of the settlements have around 100 inhabitants. Smaller groups are afraid to live apart, and there-
[578] fore they join together to protect themselves. Larger groups soon split up, owing to internal frictions.

[622] Within the settlement there is generally one or two more influential individuals, who not only direct their own families, but several others. When these groups grow sufficiently, they split up and form their own settlements. These groups are found united in a single settlement out of fear.

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622 The largest and most influential group gives orders in the settlement. The result of this is that any struggle for command
578 will not necessarily be a test of strength between two men, but may easily turn into a struggle between the partisans of each of them. The maximum gravity reached by these contests is generally the "macana fight."

626 Public opinion is a powerful force, and even the men of greater influence have to yield on many occasions to the will of the public.

103 Each settlement usually has two names, the one of the present locality and the name of one of the localities previously occupied.

Sickness and Magic

• 752
753 Some accidents are attributed to carelessness, but many accidents and all sicknesses are attributed to supernatural causes or spirits.

/480 cont./

755 time their croonings and threats directed at the harmful spirit. From time to time they pick up some object which they take with them. Sometimes they finish by inspecting the whole circle of houses, but more frequently the one who heads the "hunt for the spirit" points with his finger at some object, which one of them picks up, the whole group suddenly rushing toward the hut where the sick person is.

755 /481/ Frequently one of those who participate in the "hunt
787 for the spirit" falls into a paroxysm, which he generally ends with a tremendous leap into the air, to fall unconscious on the ground. The women immediately bring water and after a while manage to revive him.

On one occasion a man who was crooning before a sick child suddenly lost his mind and began to say strange things. It seemed as though a strange power had seized him, to the point where it was necessary for six men to hold him so that the women could throw water on him to bring him out of his spell.

754 They also believe that a man can "send" a sickness or misfortune to another. Frequently the majority of the croonings which they intone in the evenings when they have taken "yopo" are designed to "send" calamities to their enemies.

754 On a certain occasion, when all were camped about two
752 hours of travel from the settlement, a girl was bitten by a poison-
123 ous snake. Her father came to get me to treat her. He told me that he was very angry, and he asked me if it were I who had sent the snake. He was very pleased when I assured him that I had not sent it.

754 They believe that a person can cause an enemy great harm, sickness, and even death, by gathering up "the track" of the enemy and rubbing it between the palms of the hands. For this reason the Guaika /Waica/ do not like to walk in front of somebody who is not in all certainty his friend, especially over soft earth.

The Guaika prepare certain powders which, when they are thrown in the air or blown in the direction of an enemy, can cause him annoyances or harm, according to what they believe, although the said enemy might be many miles away in another settlement.

/482 cont./

753 Any strange or rare object can be considered to have given rise to an epidemic. According to their knowledge and understanding, it might be some kind of foreign sorcery.

755 The Guaika appreciate our medicine for the treatment of
197 sores and sicknesses, but for them this medicine is simply another enchanted or magical substance.

752 /483/ The treatment which they use for a bee sting is to tie the member thus hurt with a piece of vine or string above the sting. They also suck the poison out of the wound.

The treatment for the bite of a spider or snake is similar, tying and sucking. Later, the croonings are considered appropriate for driving away evil forces.

If a man is wounded by a poisoned dart, the wound is sucked and he will live. If he is wounded where the poison cannot be sucked out, he will quickly die. When an animal or a man is mortally wounded by a poisoned arrow, he falls, loses control of his muscles, and then dies, shuddering, perhaps when the poison reaches the heart or lungs.

751 One who has killed an enemy on a raid must sit down on
727 the ground and, taking a little piece of vine (perhaps some two centimeters in length), has to scrape one side of his own head in different places. If he fails to do this, some evil may overtake him.

755 Sick persons receive all possible care, in addition to all the
758 incantations and exorcisms which are cast against the opposing forces of the spirits.

758 A sick person is well fed. If it is not possible for him to take certain foods, the Guaika will make every possible effort to get for him what he can eat.

An old woman who had an infection in her mouth and a throat so large that it was almost impossible for her to swallow anything was given honey as food. They tipped her head back and poured the honey into her mouth. They had a fire lighted for her all the time, and someone was with her constantly. When the settlement moved, she was carried on a man's back by means of a strap or cord such as is customarily used for loads or small children.

123 /154 cont./

721 At this moment Dave London and I were taking a /155/ bath in a stream about 100 meters from the aldea. We heard a lot of shouting and crying. A few minutes later a couple of men from Majecototjeti came toward us, saying, "Come look, raiders," while they pointed toward the aldea. These men did not go on, carrying only a bunch of plantains and their weapons.

We dressed rapidly and went to the aldea. Most of the [752] men had gone off in pursuit of the raiders. The women were pour- [755] ing water on the wound, while the sorcerer sang over it. Soon all of the reserve water of the aldea was used up. They asked us if we could help them. We called Ed Killiam, who brought his snakebite kit and sucked out the wound with it, until we did not dare do any more for fear of his losing too much blood, since he was bleeding freely. We also prayed.

The boy almost stopped breathing, but after an hour and a half he began to come around. Soon after this he got up and went to his house; the paralyzing effect of the curare on the 726 lungs had passed. The pursuit of the raiders continued all night and across the uppermost part of the Manaviche River. In some way the chief and "Yelequei-jûu" managed to pass some of the raiders. Two boys came back, hungry and looking for wild fruits. They found some wild cacao and stopped to eat it. At this moment the chief wounded "Dujuue" in the abdomen with a wide arrow-point of bamboo. His companion wounded the other young man in the arm.

726 (If you asked a Yanomama what he would do if he were
763 wounded and knew that he was going to die, he would strike a
183 pose which is supposed to represent bravery, and he would also state the brave words which he would say.)

But "Dujuue" did not do this. Knowing that he was going to die, he sat down, calling for his mother. The Shibaatfa-tejeti later recovered his decomposed body and took it to the aldea to [764] burn it. The other wounded young man recovered. The Majecototjeti told them that both had died, until /156/ visitors from Boletjaotjeti came and told them that the other young man had recovered.

175 648 [726] Karawatari's village.

The raiders attacked the foreigners at dawn but were driven off by gunfire; a number of the Indians were killed, among them a man called Rokohenawë, and some of the foreigners were allegedly hit with arrows. The Indians managed to capture a young girl, taking her back to Karawatari's village on the Shukumëna-u. Shortly after arriving at Karawatari's village, the abductors were in turn raided by another Shamatari village, then on the Upper Mavaca River under the leadership of Matakuwë, one of the two "original" Shamatari men. Karawatari's group had split from Matakuwë's group and was on hostile terms with it. The girl was taken by Matakuwë's men on this raid and brought to the Mavaca River. Matakuwë's village was on a branch of the Mavaca River called Kedebabëwei-u when Nabëyoma was abducted from Karawatari's [114] group. Zerries (1964:14) gives 1938 as the date of the abduction of Nabëyoma, whereas Seitz (1963:21) places it a little earlier.

[573] [952] In Matakuwë's village, Nabëyoma was given to Koyonahi's son; he shot her with a barbed arrow for disobeying him and the girl fled into the woods to nurse her wound. At this time Matakuwë's group was on friendly terms with the residents of Patanowë-tëka (who are now living in three distinct villages and constitute the groups from whom most of my data were [828] [574] taken). On one of their visits, the residents of Patanowë-tëka found Nabëyoma in the woods outside Matakuwë's village and took her home with them when they left after visiting.

men for the Kreibŏwei-tedi women distracted the Shamatari, and a large number of Kreibŏwei-tedi managed to escape. These fled to a mountain called Wadubadidiobakĕkŏ where they had previously started clearing a new garden, Kobou-tĕka. Here, the Kreibŏwei-tedi removed the arrow-points from the wounded and regained their health. They returned to Kreibŏwei-tĕka, as their new garden had not yet begun producing. Shortly after the treacherous feast the Kreibŏwei-tedi were visited by Shinanokawĕ, the headman of Mahekodo-tedi, and one of his followers, Shiroba-tedi. The two men had heard of the Kreibŏwei-tedi's unfortunate circumstances and visited them to extend an invitation to join Mahekodo-tedi while they made a new garden.

Area 8: Mahekodo-tedi

Before they left for Mahekodo-tedi the Kreibŏwei-tedi undertook a revenge raid against Riakowĕ's group. They killed two men and then retreated to Mahekodo-tedi, collecting their women and children at Kreibŏwei-tĕka as they proceeded from Riakowĕ's village to Mahekodo-tedi. This was early in 1951.

For the remaining months of 1951 the Kreibŏwei-tedi worked on their garden at Kobou, returning to Mahekodo-tedi at approximately 3-week intervals to rest and obtain more plantains; these latter were carried to Kobou to sustain the Kreibŏwei-tedi while they worked on their garden. Before Kobou-tĕka was producing, however, the Kreibŏwei-tedi decided

The jungle provides a number of hazards to the barefoot traveler in that most species of palm have long, sharp spines protruding from their trunks or leaf stems. The most common and recurrent injury the Yąnomamö sustain is thorns in the feet. A party of ten men can rarely travel an hour without one of them stopping to extract a thorn from his foot. This is always accompanied by hisses and clicks of pain on the part of the victim, who gouges the thorn out with either an arrow point or another thorn. Their feet have thick calluses on them, but because the trails frequently cross streams and swamps, the calluses soften and are easily pierced by thorns.

Another, but rarer, hazard is snakes.[2] There are always a few cases of snake bite in each village every year, although few of them are fatal. Most snake-bite victims recover from the wound with no ill side effects. I treated two cases of snake bite that were like this. But a few bites are severe enough to cause the loss of a limb. One of my better acquaintances, a young man of some thirty years, lost a leg because of a snake bite when he was about fifteen years old, and will spend the rest of his life hopping on one leg, a form of locomotion he has mastered so thoroughly that he almost manages to keep up with the group when they visit other villages.

Most of the intervillage traveling is done from September through April, the dry season. For the remainder of the year the trails, or substantial portions of them, are underwater. At this time the rains are frequent and heavy, and the small streams that can be easily crossed on foot in the dry season become impassable torrents. Small lakes replace the marshy low ground, and communication between villages all but ceases. As the Yąnomamö are an inland people and avoid locating their villages near large streams, all travel is done on foot, and each village becomes an isolated entity at the peak of the wet season (June).[3] If the group must travel, it will make simple vine and pole bridges over the smaller streams. A pair of slender poles is stuck into the river and crossed to form an X-frame. Vines are used to lash the poles together where they intersect, and another pole is laid from the bank to the X-frame, also secured by vines. Then another pair of poles is stuck into the stream and lashed to form another X-frame. The long pole is then extended out further from the bank, and so on, until the stream is bridged. A vine railing is attached to the protruding members of the X-frames. The bridges usually last only a short time. The first heavy rain will swell the stream and the current will wash it away.

TECHNOLOGY Much of Yąnomamö technology is like the pole-and-vine bridge: crude, but very effective, and not destined to last for any great period of time. The only durable artifact produced is a crude, poorly fired clay pot. It is nearly an inch thick at the bottom and tapers to almost nothing at the brim. Consequently, it breaks very easily. For this reason, women, regarded as clumsy, are rarely allowed to touch or handle them. When the clay pots are used, the men do the cooking, as, for example, during feasts. The pot is made by the coil technique: The untempered clay is kneaded to the proper consistency by hand, rolled into long, slender ropes, and these, in turn, placed on top of each other to form a continuous rope of clay. The coils are then scraped flat so that the interior and exterior of the pot are smooth. The conical-shaped pot is allowed to dry in the shade, then fired by placing brush and wood over it. The end product is

[2] Two percent of all adult deaths are due to snake bite; 34 percent are due to malaria, and other epidemic diseases (Chagnon 1966) and 24 percent of adult males die in warfare.

[3] The Yąnomamö began moving their villages out to navigable rivers after 1955. Up to that time there was only one village, Mahekodo-teri, located on a navigable portion of the Orinoco River.